

# FOWLS DURING MOULTING SEASON SHOULD BE GIVEN EXTRA CARE

Laying Generally Ceases When They Are Losing Their Feathers; Danger in Feeding Too Heavily.

Oil Meal and Beef Scraps May be Used to Improve the Condition of the Birds.

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During the moulting season the fowls of the flock should contain material that will enable them to quickly form their new feathers and at the same time build up constitutional vigor, so that egg production may not be delayed too long. In this article Professor Smith gives suggestions for the care of poultry during this critical period.

Zealous endeavor to brood the laying season is often responsible for constitutional weakness and curtailed production of eggs in winter. Correct care of the laying fowls during the moulting period will go far toward insuring profitable laying in the second year.

The moulting period is much longer than most amateurs suppose, as the first stage is likely to pass unnoticed. It is a gradual process and starts slowly. At first, a few of the larger feathers drop out, one or two at a time, but as the season advances the moult becomes more rapid.

While the fowls are in light moult, the hens probably will continue to lay, but laying generally ceases when heavy moulting begins. This is when the hen drops the mass of small or body feathers. Prolonging the laying period not only retards the moulting period, but it also is likely to result in loss of strength and vigor.

MOULT LASTS THREE MONTHS.

Ordinarily the moult begins in midsummer and continues for three to four months, although the moult may not last longer than six weeks. A hen that begins to moult in July should be newly hatched in October. If the moult is delayed the fowls affected will be exposed to considerable inclement weather without natural protection, and unless unusually comfortable quarters are provided they are almost certain to suffer from disease from such exposure.

Late moulting nearly always is the result of a desire to get the largest returns at the moment, even at the expense of the future. But is a late moult economical? True, eggs in summer bring an attractive price—much more than during the spring, yet not as much as during winter. All recognize that it is more difficult to make hens lay during winter than to make them lay during a late moult. And for that reason most of the old birds are disposed of just before the period of heavy or rapid moult. The few that are not sold are usually selected of birds and kept for next season's brooders, for which use they are naturally admirably adapted.

The moulting period should be a period of rest for the reproductive organs, and it will be when the fowls are not forced either at its beginning or completion. Under such conditions and with proper care, hens usually will begin to lay in February. The eggs also will be large, perfectly formed and set with yolk. The fertility, hatchability and strength of the chicks will be all that one can expect or desire.

EARLY MOULTING DESIRABLE.

When a large flock of hens are kept over an early moult will, of course, be

them from roosting, and a food to pluck them up which is also necessary. When the method of procedure is as follows: Gather the long flight on the first joint of wing and half of the next joint. Get them even, so that the two outer feathers do not bind or pull, which causes irritation to the wing. Next, pinch a ring tight around the bunch of feathers close to the edge of the wing, clasp the wing to the side of the body, and then the remaining feathers in two sections. The rings may be removed any time by the use of wire-cutters.

PLANTING EVERGREENS

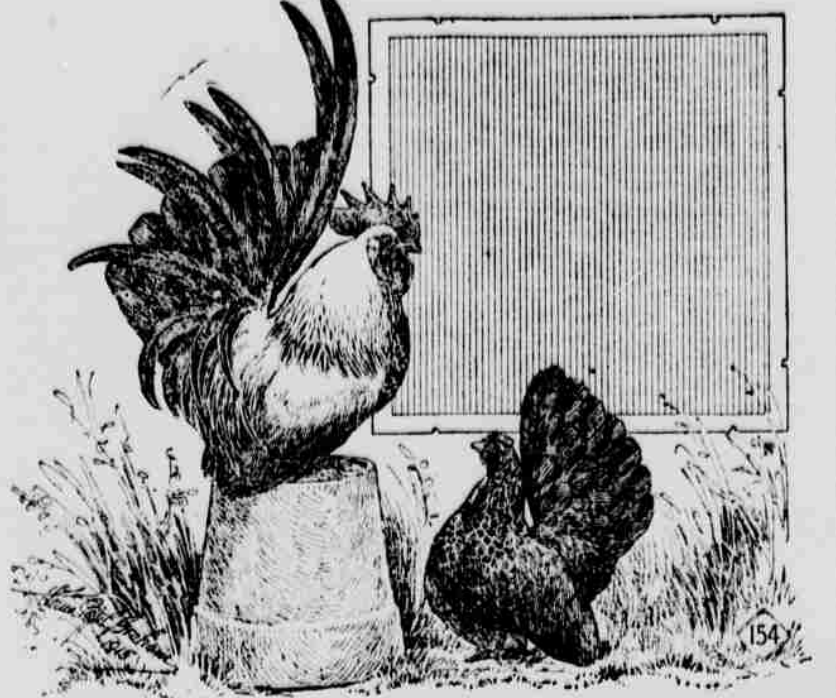
How and When to Plant.

There has been discussion as to the best time to plant evergreens, many persons contending that spring is the most satisfactory time. But late August is also preferred by many people, and is a safe month, as the roots are then allowed plenty of time to secure a hold on the soil before winter. When the trees to be transplanted arrive from the nursery, the greatest care should be taken that the roots are not exposed to the sun. As is generally known, the roots of evergreen trees are full of resin, and so dry up quickly with the slightest exposure to sun and air; the roots, therefore, should have as much soil as possible left around them, and be wrapped immediately in a wet canvas bag until ready for planting.

It should also be remembered that trees of the evergreen variety need much more moisture than the usual deciduous kind, as they are in leaf the whole year, and are thus giving out moisture through their leaves when other trees are resting. There must be plenty of water transmitted through the trunk and roots all year, and good drainage facilities are therefore, absolutely necessary.

HOW TO PLANT.

The simplest way to plant a hedge is to dig a trench some 1-2 feet deep and fully 6 feet wide, filling the first foot of space with tile or small stones, and perhaps a few ashes which allows the requisite space for drainage. Next put in with the top downward some mossy soil, and after that, fill in with rich soil from the garden, mixed with one-quarter its quantity of well-rotted manure, thoroughly pulverized. It is best to set out young plants for a hedge not more than three feet high, as then



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## Gray Japanese Bantams

When the Japanese bantams were first introduced into England, and thence into America, the only varieties were white, black and black-tailed white. English fanciers developed the attractive Gray Japanese Bantams, shown above. In color they are like the Birchen Gray Bantams.

The male has a silvery white neck-hackle, saddle hackle and top of wing. The balance of his plumage is lustrous greenish black, except the breast, each feather of which is laced or edged with silvery white. The female is intense black in all sections except the neck and under part of breast, each feather of this section being edged with white. They have legs only about an inch and a half long, and the wings are carried drooping almost to the ground. The tail is very long and stands up along the back and past the top of the head. These bantams may be kept successfully in limited quarters. They eat little and are easily cared for. The hens are good layers.

Gray Japanese Bantams should not exceed 20 to 22 ounces in weight for females or 22 to 25 ounces for males.

of advantage because early winter laying is possible only when accompanied by early moulting. This means a late summer or early fall moult, which is natural with pullets that were hatched early and that have been kept laying.

For birds hatched later and those that for any reason moult in July, a forced moult is sometimes employed, the hen being made to begin her moult earlier than she would naturally. This may be effected in several ways, some of which are more rapid than others. The advantage of this expedient has often been questioned. Many maintain that it is harmful, and authentic records seem to prove that while the next laying period may be advanced, the egg yield for the year usually is considerably diminished. This might be expected, inasmuch as the moult is shortened by high feeding. The higher price received for eggs compensates in part, however, for the reduced yield. Whether or not this is a harmful practice, depends considerably upon the rapidity of the moult.

The theory of forced moulting is that by reducing flesh sufficiently, the feathers become dead and loosen, and, therefore, drop out more quickly; then by feeding liberally, new feathers are grown rapidly, the body built up, and a laying condition restored.

SECURING A FORCED MOULT.

The most radical method practiced consists of confining the hen and feeding her from one-quarter to one-half of her usual ordinary feed. Even this limited ration consists of the foods least fattening, such as oats and wheat bran.

Both males and females moult earlier if they have been confined for considerable time. Fanciers who want to exhibit at the fall and early winter shows make use of this fact to assist them in fresh, new plumage.

The production of both feathers and eggs require much the same kind of nourishment, which is perhaps the real explanation of why hens in heavy moult seldom lay. If a ration sufficiently rich to form both feathers and eggs rapidly was provided, the digestive machinery would collapse and neither feathers nor eggs would be formed. Thus, whether the hen forms feathers or eggs,

she must be supplied with a small but appreciable amount of mineral matter and a liberal supply of protein, because feathers are found to contain both mineral matter and protein. It then becomes apparent that feathers and eggs are not so different in composition as form and appearance would lead one to believe.

CONDITION OF THE SKIN.

A soft, oily skin is favorable to a rapid and healthy growth of feathers and hence other animals may be fed to promote such a condition. To secure this, a liberal supply of such fat-containing foods as beef scraps, oil meal, etc., are often included in rations for moulting hens.

Oil meal is not especially palatable and should be used sparingly, possibly one part in 10 or 20 dry mash as commonly compounded. With the light and active breeds beef scraps may be fed in moderation, thereby effecting a saving, as fowls soon get a sufficient quantity and are not continually picking over the dry mash for bits of this animal food, wasting time and labor to save scraps. When mixed in mash, 15 per cent is a fair proportion.

To those who would take advantage of forced moults, a word of caution is due. Do not reduce rations abruptly. Furthermore, do not reduce them to the extent that the fowls' constitution is impaired. Rather depend upon confinement and a selection of feeds that have little forcing or fattening tendencies. This would mean the elimination of food especially rich in either fats or proteins, for example, beef scraps, corn, oil meal, etc. Select those that in themselves form more nearly a maintenance ration, such as oats, with wheat bran, and sufficient green foods, always available during the moulting season. Give enough of these to maintain health, with the assistance of free access to the air and salt licks.

The general welfare of the birds should be looked after. Male should be excluded from the pen. As the hens are thin and tender while the new feathers are growing, fowls in moult should not be caught. They should be placed in a building which has been recently thoroughly cleaned and disinfected with a mild exterminator and should be thoroughly rid of body lice before moulting begins.

they grow more successfully, and the young roots are more pliable and adaptable to their new home. In planting, set them about 1-2 feet apart, spread out the new roots horizontally, filling in carefully with the earth around the roots, and afterwards firming the soil on top to a hard surface. For single tree planting, a hole four feet deep and six feet in diameter should be dug out and filled in as described above for the hedge. Certainly, no trees and greater distinction to a lawn if proper specimens are obtained than the many varieties of evergreen, and as tall hedges for ornament, or for use as shelter and windbreaks they are unequalled.

When sheared into shape, for hedge purposes, the hardiness of all the native evergreens is the hickory, Norway Spruce, Canadiana, etc. It is very open, feathery and stately, when allowed its natural growth, and standing alone, graceful, but vigorous, on a wide sweep of green lawn. As a single ornamental specimen of evergreen, noted for its beautiful deep-green foliage, silvery beneath, and contrasting admirably with the lighter-leaved specimens, the Nordmann's fir tree (Nordmanniana) is deservedly noted. It is a good grower, and much in demand for beautifying open spaces.

CAN SHE MAKE A CHERRY PIE?

Plant a Few Cherry Trees and Try It.

There is always the alternative of sending down to the corner grocery shop for a quart of sour cherries, but in that case the chances are that the rosy, juicy pie will never fully attain to the supreme delicacy it was intended to be. Thus the wiser plan is to grow cherries on the home grounds and in determining upon the right number of trees to plant figure upon 125 quarts for an average-sized family, and to produce this amount some six to eight trees will suffice.

Cherry trees differ in size and shape, and sweet cherry trees are as large or larger than apple trees, growing erect and straight in branch and trunk; the bark is reddish brown and peels off in strips around the trunk and limbs. Sour cherry trees, on the other hand, are much smaller, are apt to be low and spreading, irregular, and somewhat crooked. For those who prefer dwarf trees, they may be had in either of two

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Black Tartarian, black, early, sweet. Cox's Transparent, amber, early, excellent. Downer's, red, midseason, good. Gov. Wood, amber, early, fine. Lamberts, red, midseason, fine. The sour sorts include:

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For birds hatched later and those that for any reason moult in July, a forced moult is sometimes employed, the hen being made to begin her moult earlier than she would naturally. This may be effected in several ways, some of which are more rapid than others. The advantage of this expedient has often been questioned. Many maintain that it is harmful, and authentic records seem to prove that while the next laying period may be advanced, the egg yield for the year usually is considerably diminished. This might be expected, inasmuch as the moult is shortened by high feeding. The higher price received for eggs compensates in part, however, for the reduced yield. Whether or not this is a harmful practice, depends considerably upon the rapidity of the moult.

The theory of forced moulting is that by reducing flesh sufficiently, the feathers become dead and loosen, and, therefore, drop out more quickly; then by feeding liberally, new feathers are grown rapidly, the body built up, and a laying condition restored.

SECURING A FORCED MOULT.

The most radical method practiced consists of confining the hen and feeding her from one-quarter to one-half of her usual ordinary feed. Even this limited ration consists of the foods least fattening, such as oats and wheat bran.

Both males and females moult earlier if they have been confined for considerable time. Fanciers who want to exhibit at the fall and early winter shows make use of this fact to assist them in fresh, new plumage.

The production of both feathers